

Meeting Notes: Community Advisory Group - Aerojet Superfund Issues, July 19, 2005

1. Attendees

Charles Berrey (USEPA, Aerojet RPM), Alex MacDonald (Regional Water Quality Control Board), Jackie Lane (EPA), Michael Girard (Aerojet), Tricia Carter (Recorder, CH2M HILL), Paul Schubert (SCWC), Janis Heple, Pam Martin, George Waegell, Larry Ladd, Vickie Lee, John Valdez (Sacramento Suburban Water District), Frank McCarthy, Steve Nugent (Carmichael Water District), Chris Fennessy (Aerojet), Rick Bettis

2. Approval of Meeting Minutes

Paul Schubert provided a clarification on the May meeting minutes regarding the amount of water that will be allocated to Cal America Water Company. Paul suggested deleting the sentence “15,000 acre feet are allocated to SCWC and 15,000 acre feet to American States”. These two entities are the same and a total allocation of 30,000 acre feet is inaccurate.

3. Update on major milestones and deliverables produced since the May meeting for OU3 and other environmental related efforts at Aerojet.

Charles Berrey updated the CAG on recent OU-3 activities/deliverables. Since the last meeting, the following has been completed:

- Agencies required resubmission of “Final Design Area 1” to include revision to groundwater modeling (include Layer D monitoring well data and provide for all wells to the permanent treatment plant). This will be necessary because the treatment plant needs the full volume of water from the extraction wells to be fully operational. This will also help define the D aquifer contamination to determine if additional extraction wells are required.
- Agencies granted Aerojet an extension for submission of Short and Long-term Water Replacement Contingency Plans based on negotiation status with CalAm. Agreement pending between Aerojet and CalAm to use the Chettenham water supply well for toe of plume control in Area 1. Aerojet is extracting groundwater at a temporary location to address perchlorate and potentially TCE. Currently trying to determine a location for the permanent treatment plant. A minor glitch in the proposed building (aesthetic reasons) pushed the schedule back by a couple of months.
- Aerojet submitted three Notice of Contractor Selection, Preconstruction Meeting Reports for Areas 1 and 2.

Charles summarized other Aerojet Environmental Efforts:

- Agencies approved a background metals sample size of 40 samples per each of two summary soil classifications, provide comments and request Background Metals Work Plan. Area 41 with a third soil type was excluded by Aerojet from this effort. Background levels for metals could impact OU5 and other OUs. This effort forms a baseline for the general presence of metals on the Aerojet site.
- Aerojet submitted “Landfill Site Remedial Investigation/Feasibility Study Work Plan”. Comments are pending.
- Agencies approved three treatability studies subject to revision of Work Plans for Dense Non-Aqueous Phase liquids containment for OU-7 (Island OU). Agency review of Aerojet responses pending. Charles noted that OU7 is on a parallel path with OU6 in progressing to the RI/FS stage. Proven remedies are needed; therefore, “ground breaking” technologies will be looked into now, prior to the ROD.

- Aerojet submitted “Final Remedial Investigation/Feasibility Work Plan” for Source Areas OU (OU-6). Comments are pending.
- Aerojet submitted “Field Sampling Plan for Validation of the Johnson and Ettinger Model”. Agency comments pending. The model will be used as a tool to gather data to see if a correlation can be made between the model and the data. Monitoring well data across Aerojet will be used to determine the impact at the surface. Soil data will be used as part of the calibration of the model. It was also noted that confirmation sampling will always be conducted to determine the actual presence of contamination.
- Agencies agreed to two month extension for Aerojet to submit annual three year cost data.
- Aerojet submitted revised “Standard Operating Procedures for Aerojet Site”. Agencies currently reviewing.
- Aerojet submitted “Response to Agency Comments 2005/6 Exhibit IV Monitoring Plan”. Agencies’ review of response sending.
- Aerojet submitted “Landfill Closure Modification Plan”. Agencies will review and comment.
- GenCorp announced definitive agreement to sell Aerojet Fine Chemicals to American Pacific Corporation.

4. Update on Well Installation Activities in OU-3 and Beyond.

Alex MacDonald provided an update on the latest activities:

- Data for the monitoring wells in the D zone is not back from the lab yet.
- Four more wells will need to be installed in Zone 3.
- Approval was received to address the edge of the plume (5 ppt of NDMA) on the American River parkway.
- A revised groundwater feasibility study was received for the IRCTS regarding extraction and treatment of the toe of the plume. The FS will also determine if the middle of the plume will need to be addressed as well.

5. Onsite Remedial Investigation/Feasibility Study Update

Chris Fennessy with Aerojet provided an overview of the RI/FS. Chris provided a brief background and noted that the partial consent decree identified potential source areas as part of a scoping report back in 1989/1990. Aerojet then entered into Stage 1 investigations as an initial effort to target where the contamination was located. From 1991 through 1993, areas with the most problems were identified and Stage 2 investigations were conducted as well as risk assessments. At that time, the focus of these investigations changed as drinking water wells were impacted. Modifications were made to the partial consent decree and the focus was redirected to groundwater; hence, the beginning of the Western Groundwater Operable Unit (WGOU). In 2000 to 2001, a carve out assessment was conducted to identify areas to take out of Superfund.

An operable unit approach was developed in the partial consent decree as a management tool for cleanup (i.e. OU3 – Western Groundwater OU, OU4 – Cavett Ranch, OU5 – Perimeter Groundwater OU). The program plan modification report (December 2004) requires Aerojet to come back to the source areas to group, rank, and prioritize their investigations. Four more OUs were identified as part of the program plan modification report (Island, Central, Eastern, and Boundary OUs). The Island and Boundary OUs will be tracked at the same time followed by the Eastern OU (there is concern over

whether the Central OU should have a higher priority). Investigations in these areas will be conducted to determine if they exceed the criteria and have a high priority. The Central OU will then be addressed, followed by Area 41. A schedule has been adopted into the partial consent decree. Due dates have been set for the Boundary OU Work Plan for the RI/FS, the Sampling Analysis Plan (SAP) field investigation for the Boundary and Island OUs, and the prioritization document for the Central OU. Due dates have not been established for the other OUs, but this will be a part of the update to the decree.

The RI/FS work plan for the Boundary OU was submitted as final in June 2005. General approaches for each source area were identified. Field work will begin (pilot studies) for the Island and Boundary OUs to address DNAPL. A SAP for the RI/FS is due in April 2007. A Field Sampling Plan will be expedited for the Boundary OU in order to go out in the field this summer to conduct a full delineation of the nature and extent of contamination in this area.

Larry expressed his concern of unknown contaminants. Chris described how contaminants are identified and noted that he would provide the TIC data to Larry.

6. Groundwater Contamination and Remediation in Carmichael.

Steve Nugent (Carmichael Water District) provided an overview of the groundwater contamination and cleanup effort in the Carmichael area. Steve noted the location of the Rossmore Bar well (just south of the American River) where NDMA was detected at 300 ppt. Steve also noted the locations of two new monitoring wells that were installed at Grant Avenue and Palm Drive within the Carmichael Water District as a result of this detection. NDMA was detected in the Grant Avenue well at 93 ppt and the toe of the plume now extends into the water district. Steve pointed out the locations of four additional wells, Marshall Avenue, Landis Avenue, and Ancil Hoffman located within the district and Amy Avenue, located just to the east of the water district boundary. These four monitoring wells surround the toe of the plume and have remained non-detect with the exception of the Ancil Hoffman well with a detection of NDMA at 5 ppt, further extending the plume within the water district. The eight production wells within the district have not been impacted by the contaminant plume which has not yet reached the 2000 foot buffer designated for each well (per the EPA) or the DWSAP zones.

A joint contamination committee meets to address the issues in the water district. Participants include Arden Cordova Water Service, Cal-American, Carmichael Water District, City of Sacramento, Citrus Heights Water District, Fair Oaks Water District, Sacramento County, Sacramento Groundwater Authority, Water Forums. Goals of the regional committee include: 1) raise level of awareness, 2) insist that responsible parties identify and contain all contaminant plumes, 3) ensure responsible parties proceed with expedient clean-up and 4) develop replacement water supplies.

The committee has briefed Senator Deborah Ortiz, Supervisor Roberta MacGlashan, Supervisor Roger Dickinson, Congressman Dan Lungren, Congressman John Doolittle, Senator Dave Cox, Assemblyman Roger Niello, and Supervisor Susan Peters. The Committee has also established monthly technical meetings with USEPA, RWQCB, DTSC, DHS, Aerojet and Boeing and established quarterly division chiefs meetings to discuss direction of clean-up and potential policy changes. On a regional level, the Carmichael Water District has established a strategic plan. The goals of the plan are to provide protection to the customers of Carmichael from groundwater contamination and give the District a multi-facade approach in dealing with this issue. The eight objectives to meet these goals include: 1) detection & identification of contaminants near our water supply wells, 2) expansion of the Bajamont Water Treatment Plant, 3) assist Aerojet in locating, permitting remediation facilities, 4) using treated, extracted groundwater at Ancil Hoffman Park, 5) increased conservation efforts to reduce overall demand, 6) identify potential funding sources for projects, 7) work regionally to in act legislation to increase funding to expedite remediation efforts, and 8) legal representation.

7. Next Meeting.

Next meeting: Tuesday, September 20, 2005, Sheriff's substation, Community Room, 10361 Rockingham Way (just off Mather), Rancho Cordova, 7 p.m. to 9 p.m.